

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-31 (canceled)

32. (Currently amended) An analyzer ~~A flow-through shear analyser~~, comprising:

a sample chamber having a measuring surface and a plurality of walls, wherein at least one of the plurality of walls is radiation permeable;

a supply line fluidly coupled to the sample chamber and supplying a mixture of a chamber solution and a fluid immiscible with the chamber solution to the sample chamber;

wherein the sample chamber is configured such that a film of chamber solution is formed between the measuring surface and the immiscible fluid when the mixture is in the sample chamber; and

~~— a means for generating extremely thin liquid layers, wherein the means is fluidly coupled to the supply line;~~

~~wherein the means subdivides a volume flow in the supply line by introducing a volume of a fluid that is immiscible with the chamber solution, thereby rendering an adsorption rate of a signal-generating molecule to the measuring surface substantially independent from a mass transport of the signal-generating molecule to an interface layer between the chamber solution and the measuring surface; and~~

an optical detector ~~an analyser unit~~ coupled to the sample chamber and configured to detect an analyte signal from the film.

33. (Currently amended) The analyzer ~~flow-through shear analyser~~ of claim 32, wherein the sample chamber is disposed within a sample chamber block, and wherein the supply line further comprises a closable injection opening.

34. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 33 wherein the ~~analyser unit comprises~~ further comprising at least one of a radiation source, a radiation conduit, and a radiation analyzer ~~analyser~~.
35. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 34 further comprising a first pump fluidly coupled to the supply line, wherein the first pump supplies the chamber solution to the chamber, and further comprising a second pump fluidly coupled to a removal line that is fluidly coupled to the sample chamber.
36. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 34 wherein the radiation source comprises a light source that produces a monochromatic light beam, and wherein the radiation conduit comprises an optical prism, and wherein the radiation ~~analyser~~ analyzer comprises an emission monochrometer.
37. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 36 wherein the radiation conduit and the light source are configured such that a light beam from the light source impinges upon the measuring surface ~~an interface layer between one of the plurality of walls and the chamber solution~~ at an angle larger than a critical angle, and wherein a fluorescence light generated at the measuring surface ~~interface layer~~ is directed via an optical system to the radiation ~~analyser~~ analyzer.
38. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 32, wherein the chamber solution comprises at least one of a hydrophilic liquid and a hydrophobic liquid.
39. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 32, wherein the fluid that is immiscible with the chamber solution is selected from the group consisting of a gas and a liquid.
40. (Currently amended) The analyzer ~~flow-through-shear analyser~~ of claim 32, wherein the chamber solution comprises a buffer, and wherein the fluid that is immiscible with the chamber solution comprises a gas.

41. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 32, wherein the sample chamber comprises a radiation-permeable flow-through cuvette that has a rectangular or circular cross section perpendicular to a flow direction of the chamber solution.
42. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim ~~41~~ 32, wherein the at least one radiation permeable wall comprises quartz glass.
43. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim ~~41~~ 32, wherein the at least one radiation permeable wall further comprises a coating that promotes specific binding of the signal-generating molecule to the radiation permeable wall.
44. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 32, wherein the analyte ~~signal-generating molecule~~ comprises a biologically active molecule.
45. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 44, wherein the biologically active molecule comprises a protein, and wherein the biologically active molecule reacts with a ligand.
46. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 32, wherein the sample chamber is cylindrical, ~~and~~ wherein a light-permeable rotor is rotatably disposed within the sample chamber, ~~and~~ wherein the sample chamber is closed on one end by a light-permeable quartz plate, and wherein the ~~flow-through-shear-analyser~~ analyzer further comprises a motor that actuates the rotor.
47. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 46 further comprising a removal line, wherein the rotor has a rotational axis, and wherein the supply line and the removal line are arranged ~~essentially~~ diametrical to the rotational axis.
48. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 47 wherein the supply line and the removal line are at least partially disposed within the quartz plate.
49. (Currently amended) The analyzer ~~flow-through-shear-analyser~~ of claim 46 wherein the supply line further comprises a closable injection opening.

50. (Currently amended) The analyzer ~~flow-through shear analyser~~ of claim 47 wherein the rotor has a cone shaped surface, and wherein the rotational axis and a tangent to the cone-shaped surface form an angle between 58 degrees and 89.9 degrees.

51. (Canceled)

52. (Currently amended) A method of analyzing a component in a liquid, comprising:

providing a sample analysis chamber comprising a measuring surface ~~solid phase, and a supply line fluidly coupled to the sample analysis chamber;~~

feeding a mixture of the liquid and a fluid that is immiscible with the liquid in a liquid flow through into the sample analysis chamber; such that a film is formed from the liquid, wherein the film is disposed between the measuring surface and the immiscible fluid when the mixture is in the sample chamber, wherein the liquid flow is subdivided in the supply line by a fluid into a plurality of volume segments prior to entry of the liquid flow into the sample analysis chamber, wherein the fluid is immiscible with the liquid; and

optically detecting an analyte signal from the film.

~~analyzing at least some of the volume segments for the component that is enriched in at least one of an interface layer between the solid phase and the liquid and an interface layer between the liquid and the fluid.~~

53. (Currently amended) A method of analyzing a component in a liquid, comprising:

providing a sample analysis chamber comprising a solid phase, and a supply line fluidly coupled to the sample analysis chamber;

adding to the liquid in the supply line a plurality of volumes of a fluid that is immiscible with the liquid, wherein the volumes are added in an amount sufficient to form a plurality of volume segments from the liquid in the supply line;

feeding the plurality of volume segments of the liquid ~~liquid in a liquid flow~~ through the sample analysis chamber, ~~wherein the liquid flow is subdivided in the supply line by a fluid into a plurality of volume segments prior to entry of the liquid flow into the sample analysis chamber, wherein the fluid is immiscible with the liquid;~~ and

optically detecting an analyte signal from analyzing at least some of the volume segments for the component that is enriched in the fluid.

54. (Previously presented) The method of 53, wherein the fluid comprises at least one of a gas and an immiscible liquid.
55. (Previously presented) The method of claim 53 further comprising providing a two-way valve fluidly coupled to the supply line, wherein the two-way valve receives the liquid and the fluid in a liquid feed line and a fluid feed line, respectively, and wherein the two-way valve is intermittently switched between the liquid feed line and the fluid feed line during the step of analyzing.
56. (Currently amended) The method of claim 53 wherein ~~the~~ liquid flow is stopped prior to the step of optically detecting analyzing.
57. (Currently amended) The method of claim 53 further comprising reversing the liquid flow in the supply line.
58. (Currently amended) The method of claim 53 wherein the liquid and the fluid have flow has a temperature, and wherein the temperature is changed in a stepwise fashion.

Claims 59-61 (canceled).